INDEX

January to March, 1917.

[*For Index of Register of Patents, Correspondence, and Parliamentary and Legal Intelligence, see pp. x. and xi.*

Aberystwyth Gas Company, 370
Accidents, 26, 34, 83, 223, 266, 426, 479
Account, Gas, Married Woman's Liability for, 148, 163
Accounts of the London and Four of the Suburban Gas Companies, 396, 397
Adam, Mr. W. G., on Oil Washing for Benzene and Toluene, 343, 392, 414
Adams, Mr. O. W., on the Backward Rotation System of Purification, 299
Advertising, Michigan Gas Association and, 57
Air Raids—
  Telephone Calls and, 262
  Warning in Edinburgh, 476, 618
Airdrie Gas Undertaking, 556
Aldershot Gas, Water, and District Lighting Company—
  Accounts, 313
  Progress of the Electricity Undertaking, 597
  Staff and the War, 193
Alliance and Dublin Consumers' Gas Company—
  Charge of Stealing Breeze from, 480
  Dividend, 528
  Furnace Exhibition, 368, 417, 480
  Increase in Price, 570
  Report and Accounts, 566
  Stove Hire, 172
America—
  Benzol and Toluol Recovery in, 16
  Bye Product Oven Statistics, 251
  Calorific Value Question in, 558
  Coal Costs in, 78
  Coke Production in, 201
  Comparative Cost of Light per 1000 Candle Hours, 212
  Fire Brick Industry in, 291
  Gas Industry in, 150
  Gas Oils in, 249
  Gas Publicity Scheme in, 22
  Maintenance *v.* Cheap Mantles in, 297
  Natural Gas Business in, 158
  Official Documents and Bulletins, 115, 116, 212, 291, 553, 558
  Oil Producing Qualities of Shales in, 120
  Research Work in, 105
  Sulphate of Ammonia Output in, 214
American Chemical Society—Atwater, Mr. C. J., on Transformation of Ammonia to Nitric Acid, 26
"American Gas Engineering Journal," 148
American Gas Institute—Downing and Pohlman, Messrs., on Cracking Gas Oils, 24
American Institute of Chemical Engineers—Sperr, Mr. F. W., Junr., on Benzol after the War, 295
American Mining Congress, 78
American National Commercial Gas Association and the Training of Employees, 154
American Society of Heating and Ventilating Engineers, 515
Ammonia—
  Recovery and Intensive Scrubbing, 63
  Transformation of, to Nitric Acid, 26
Amsterdam Gas Works and Vertical Retorts, 248, 341
Anderson, Mr. W. E., on Shale Oil in New Brunswick, 509
Andover, Price of Gas at, 619
Arbitration, Skegness Gas, 307
Arbroath Calorific Power Application, 58
Architecture, Use of Gas and Its Influence on Domestic, 114
Ardee Gas Company, 161
Ardrossan, Automatic Light Controllers at, 622
Armstrong, Prof. H. E., on—
  Can Coal Gas Survive as a Lighting Agent? 56
  Editorial Comments, 448
  Fuel Economy, 13
  Remarks at the South Metropolitan and South Suburban Gas Companies' Meetings, 448, 468
Ashton Gas Company's Calorific Standard Application, 150
Assessment of Salford Gas Mains, 519
Association of British Chemical Manufacturers *see* Chemical)
Athens and the Piræus, Suspension of Gas Lighting in, 574
Atwater, Mr. C. J., on Transformation of Ammonia to Nitric Acid, 26
Audley, Mr. J. A., on Zirconia as a Refractory Material, 559

Ballymena, Price of Gas at, 314
Bankruptcies—
  Hutchinson, J. A., 123
  Preston, E. O., 311
Barbados Gas Works, 106
Barnet Gas and Water Company, 473
Barrhead Gas Works Fined for Non-Attendance to Telephone Call, 262
Bath Gas Company, 426
Batley, Price of Gas and the Rates in, 80
Beadenkopf, Mr. G., on Exhaust Steam for the Generation of Carburetted Water Gas, 299
Beckett, Mr. A. E., on a Laboratory Gas Meter, 298
Bedson, Prof. P. P., on Coke Oven Practice, 251
Belfast, Gas Escape Accident in, 266
Belfast Gas Undertaking—
  Accident at the Works, 34
  Chairmanship and Vice-Chairmanship, 337
  Contribution of Employees to Volunteer Field Hospital, 82
  Death of the Chairman, 503
  Effect of the Summer Time Act, 83
  Estimates, 526
  Increase in Price, 426
  Output, 266
  Staff and the War, 60
Benn, Mr. E. J. P., on the Organization of Trades, 155
Benzol and Toluol—
  Adam, Mr. W. G., on Oil Washing for, 343, 392, 414
  After the War, 109, 242, 295, 507, 569
  America and, 16, 116
  Are Gas Undertakings Doing their Share in the Recovery of? 356
  Copp's, Mr. Harold E., Apparatus for Estimating, in Coal Gas, 505
  "Cricket" on, 104, 109, 507
  Drew, Mr. W. N., on the Rectification of, 201, 514
  Editorial Comments, 104, 146, 148, 191, 242, 285, 356, 449
  Egloff and Moore, Messrs., on the Production of, 150
  Estimating and Extracting from Coal Gas, 146, 159, 296, 334, 347, 505, 557
  Government Payment for, 314, 591, 613
  Leeds Gas Works Plant, 162
  Lessing's, Dr. R., Method of Extracting, from Coal Gas, 146, 159, 296, 334, 347, 557
  Litigation Respecting the Carriage of, 620
  Mottram, Mr. E. A., on the Ossett Plant, 449, 464
  Oil Washing for, 104, 109, 343, 392, 414, 507
  Rectification of, 201, 514
  Rhead, Mr. T. F. E., on Physico-Chemical Considerations Affecting, 191, 207
  Sharp, Mr. M. S., on, 569.
  Sowerby Bridge Gas Works and, 82
  Sperr, Mr. J. W., jun., on, 295
  Wilson, Mr. J. A., on, 73
  Work of Captain R. S. Hilton and Dr. W. B. Davidson, 26
Benzol for Motors, 196
Bexhill Water and Gas Company, 595, 622
Bills (*see* "Parliamentary Intelligence")
Bilston Gas Company, 83
Birkenhead Calorific Power Application, 58
Birkenhead Electric Light Failure, 368
Birmingham—
  Lighting Restrictions in, 77, 83
  Trading Departments and the Rates, 527
Birmingham Electricity Breakdown, 504
Birmingham Gas Undertaking—
  Appeal to Consumers for Economy, 307
  Calorific Power Order, 150
  Death of an Ex-Chairman, 246
  Profits and the Rates, 527
  Record Gas Consumption, 72, 82
  Staff and the War, 106, 290
  Wages Question, 263
  War Loan Scheme, 243
Bishop's Castle Gas Works, 246
Bishop's Stortford Gas and Electricity Company, 427
Blackburn Gas Works—
  Death of Mr. A. Morton Fyffe, 150
  Engineership, 349
  Wages Question, 38
  War Service Brochure, 35
Blackpool Gas Bill, 17
Blakeborough, J., & Sons, 615
Bland Light Syndicate, 374
Blauvelt, Mr. Warren S., on Ammonia Recovery and Intensive Scrubbing, 63
Blyth Gas Company, 427, 524
Board of Trade—
  British Industries Fair, 244, 464
  Calorific Power Orders (*see* Calorific)
  Certified Occupations List, 244
  Coal and Coke Exports, 154, 336, 553
  Coal Standard Price Application, 26
  Commercial Intelligence Department—
    British Mantle Manufacturers, 374
    Enemy Countries Goods, 266
  Companies' Report, 336
  Deputation of Local Authorities on the Calorific Standard, 242, 259
  Electric Power Committee, 617
Boilers—
  Coke for (*see* Coke)
  Electric, Enemy Patent Litigation, 338
  Natural Gas for, 115
Boiling Points, Correction of Thermometers in the Determination of, 110
Bolling and Lowe's Report on the Metal Trades for 1916, 109
Bolton Gas Undertaking—
  Calorific Standard Application, 506
  Toluol Recovery, 314, 529
Books, &c., Received—
  Coal Tar Colours (Norton), 249
  Defence of the Realm Manual (Pulling), 109
  Employers and Workmen under the Munitions of War Acts (Fyfe), 503
  Low Pressure Gas Distribution (Hampton), 509
  Modern Gas Works Practice (Alwyne Meade), 400
  Registration of Business Names (Jordan), 196
  Report of Patent, &c., Cases (Underhay), 63
  Transactions—
    Gas Associations in the United Kingdom, 296
    Institution of Gas Engineers, 152
    New England Association of Gas Engineers, 514
  Weights and Measures (Granger), 72
Boot, Mr. Horace, on Gas *v.* Electric Heating, 152
Bordon Gas Company's Calorific Standard Order, 14, 560
Boston, Suffocation by Gas at, 374
Bournemouth, Gas Explosion in, 429
Bournemouth Gas and Water Company, 372, 419
Bradbury and Hirsch's Review of the Sulphate of Ammonia and Nitrate of Soda Market for 1916, 146, 166
Bradfield's, Mr. F. J., Comparative Working Results of the Three Metropolitan and Four of the Suburban Gas Companies, 396, 397
Bradford, Suffocation by Gas in, 122

325491

Bradford Dyers' Association, 569
Bradford Gas Undertaking—
An Old Official, 151
Calorific Standard Question, 369
Fire at Low Moor Works, 423
Official Change, 595
Brecon Gas Company's Calorific Standard Application, 109
Brentford Gas Company—
Meeting of Shareholders, 305
Report and Accounts, 260
Working Results, 396, 397
Bribery and Fraud Charges in Connection with Gas Globe Deliveries, 148, 164
Bricklaying in Relation to Gas Making, 408
Bridlington Gas Company—
Calorific Power Order, 196
Testing Apparatus, 480
Wages Question, 374
Brighouse Gas Fatality, 263
Brighouse Gas Workers' Wages, 223
Brighton and Hove General Gas Company—
Accounts, 428
Loss of the s.s. *John Miles*, 429
Meeting of Shareholders, 471
Brighton Town Council and the Gas Supply, 216
Brimsdown Lamp Works, 373
Briquettes—
Lantsberry and Paton, Messrs., on, 19 258
Nuremberg Gas Works Plant, 560
Yeadon, Mr. J. A., on, 206, 258
Bristol, Gas Jet Heater Fatalities at, 362
Bristol Gas Company—
Accounts, 424
"Bristol Times and Mirror" on, 571
Official Change, 395
British Coalite (*see* Coalite)
British Commercial Gas Association—
Editorial Comments, 287
Electrician's Views on, 453
Executive Committee's Report, 294
Food and Fuel Economy, 287
Literature, 121, 400, 606
British Dyes Limited, 218, 595
British Gas Light Company—
Norwich Calorific Power Order, 354
Potteries Station Calorific Power Order, 560
British Gas Purifying Materials Company, 36
British Industries Fair, 244, 464
British Westinghouse Company's Employees' War Relief Fund, 622
Broadstairs Gas Company, 168
Brook, Mr. G. B., on Coal Gas for Melting Non-Ferrous Alloys, 599
Brynmawr and Blaina Gas Company, 477
Bullard, Mr., on Electric Cooking, 153
Burley-in-Wharfedale and the Gas and Water Managership, 616
Burners, Sevenoaks Gas Company and the Supply of Cheap, 262
Burnley—
Gas Undertaking Working Comparisons, 615
Increase in the Price of Gas at, 572
Public Lighting, 129, 171
Bury (Lancs.) Calorific Standard Applications, 506
Bury St. Edmunds Gas Company, 264
Business—
Names, Registration of, 196
New, in America, 355
Bye Products Recovery Plant Patent Litigation, 216, 359

Calcium Cyanamide and other Fertilizers Made in Canada, 506
Calcutta, High Power Gas Lamps in, 261
Calendars, &c., 82
Calorific Power—
Differing Calorific Power and Lighting Values, 391, 398, 468, 501, 553, 558
Editorial Comments, 147, 190, 242, 391, 500, 501
Herring, Mr. W. R., on, 391, 413, 468
Inert Gases and, 147, 288
Paris Official Method of Measurement, 202
Relation of, to Fuel Economy, 550
Calorific Standard—
Act—
Applications for Orders under the—
Attitude of Local Authorities, 27, 165, 168, 216, 259, 310 (2), 359, 424, 481, 522
Notices of, 14, 27, 58, 109, 128, 150, 196, 249, 354, 369, 404, 482, 506, 560
Railway Companies and, 308, 356, 391, 398, 501
South Suburban Gas Company Inquiry, 308, 356, 391, 398, 451, 500, 501
"Municipal Journal" on, 373
Orders Granted under the, 58, 109, 150, 165, 196, 216, 249, 354, 404, 522, 560
Parliament and the Tottenham Order, 359
Canadian Government Regulations, 123, 196
Cambridge Gas Company—
Calorific Standard Application, 150
Meeting of Shareholders, 371
Canada—
Calcium Cyanamide and other Fertilizers in, 506
Calorific Standard in, 123, 196
During the War, and After, 411
Royal Society of, 126
Canterbury Gas and Water Company, 477
Carbon Monoxide in Illuminating Gas, 126
Carbonization (*see also* Retorts)—
Editorial Comments, 191
Hollingworth, Mr. D. V., on, 191, 197
Maclaurin's Low Temperature Process, 517
Cardiff—
Calorific Standard Question, 424
Lighting Restrictions, 130, 221
Suffocation by Gas at, 371
Cardiff Gas Company, 372
Carlisle, Gas Fatality at, 128
Carrick's Restaurant, Large Electric Cooking Installation at, 291
Cashel, Price of Gas at, 374
Cathedral, Gas Lighting for a, in Philadelphia, 16
Central Organization (*see* Organization)
Ceramic Society—
Audley, Mr. J. A., on Zirconia as a Refractory Material, 559
Cobb, Prof. J. W., on Measuring Temperatures, 560
Mellor, Dr. J. W., on the Spalling of Magnesite Bricks, 560
Certified Occupations List, 244
Ceylon, Monazite in, 506
Chambers of Commerce, Association of, 595
Chaney, Mr. W., on Producer Gas and the Utilization of Coke Dust or other Low Grade Fuel, 593, 607
Cheadle Gas Company, Nuisance Caused by, 619
Chelmsford—
Gas Works Transfer, 260, 475
Tar Prices at, 476
Cheltenham Gas Company—
Calorific Power Order, 109, 216
Meeting of Shareholders, 477
Chemical Engineer, Training and Work of the, 521
Chemical Manufacturers, Association of British, 71, 103, 149
Chemical Society—Messrs. Mylius and Huttner, on Estimation of Sulphur in Coal Gas, 76
Chemist, The, and the Gas Industry, 190, 213
Chertsey Gas Company's Calorific Standard Order, 404
Cheshunt and Waltham Abbey Gas Company, 525
Chester Gas Company, 193, 246, 421
Chetwynd, Lord, on "T.N.T." Poisoning, 221
Chicago—
Calorific Standard Question in, 553, 558
People's Gas Company of, 569
Chichester Gas Company, 481
City of London Lighting Inspector, 14
Clark, Mr. J. C. D., on Retaining Gas Lighting Business, 565
Cleckheaton, Failure of the Gas at, 315, 370
Clevedon Gas Company, 14
Clewell, Mr. W., on Factory Lighting, 158
Coal—
America and the Cost of, 78
Ash Percentage and Its Effect, 336, 339
Briquettes (*see* Briquettes)
Brown—
Distillation of, in Germany, 159
In Victoria, 354
Constituents, Solvent Action of Pyridene on, 16
Constitution of, 148, 159
Contracts, Coal Mines' Controller and, 528, 549, 566, 591, 594
Export Statistics, 154, 336, 553
German Gas Works and the Absence of English, 450, 454
German Prices for, 119
Illinois, 111
Norway and Gas Works Coal Stocks, 264
Stacking Soft, 214
Statistics for 1915, 394, 456
Supply Questions—
After the War Committee, 159
Comments, 149, 192, 549, 591, 594
France and, 37, 344
Railway Wagon Pooling and, 149
Standard Price Application, 26
Unscreened during War Time, 289
Weathering of, 344
Coal Distillation Company, 373
Coal Miners and Absenteeism, 244
Coal Mines, Government Control of—
Advisory Board, 519
Appointment of Controller, 340
Gas Coal Contracts Question, 528, 549, 566, 591, 594
Iron and Coal Trades Review on, 246
Questions in Parliament, 414, 469, 566, 615
Salford Town Council and Representation, 529
"Times," The, on, 340
Coalite Company, British, 373, 527
Coatbridge Gas Company, Liability for an Accident Caused with "Gascolite," 259, 359, 415
Cobb, Prof. J. W.—
Scientific Aspect of Fuel Economy, 596
Temperature Measurements in Clay Works Practice, 560
Coffee Roasting by Gas, 153
Coke—
American Production of, 201
Boiler Firing by—
For Electricity Stations, 106, 129
Kershaw, Mr. J. B., on, 161
Dust Utilization for Producer Gas, 593, 607
Export Statistics, 154, 336, 553
Coke Oven—
American Statistics, 251
Occurrences in the, during Carbonization, 197
Practice, Prof. Bedson on, 251
Coke Oven Bricks, Some Physical Properties of the Two Chief Mineral Constituents of, 244, 253
Coke Oven Managers' Association—
Annual Dinner, 259
Bedson, Prof. P. P., on Coke Oven Practice, 251
Editorial Comments, 12, 191, 244
Coke Oven Managers' Association (*continued*)—
Fearnside's, Mr. W. G., Lecture on Some Physical Properties of the Two Chief Mineral Constituents of Coke Oven Bricks, 253
Hollingworth, Mr. D. V., on Occurrences in the Coke Oven during Carbonization, 191, 197
O'Shea, Prof. L. T., on the Organization of the Coking Industry, 12, 20, 75
Wilson, Mr. J. A., on Benzol Recovery (Discussion), 73
Coking Industry, Organization of the, 12, 20, 75
Colchester Gas Company, 421
Cold Weather Spells and the Value of Gas Fuel, 288
Colliery Owners' Profits, 356
Colonial Gas Association, 32
Combustion Methods for the Laboratory, 56, 72
Commercial Gas Company—
Calorific Standard Application, 249
Editorial Comments, 333
Half Yearly Report and Accounts, 292
Meeting of Shareholders, 363
Working Results, 396, 397
Companies—
Board of Trade Report on, 336
Enemy (*see* Enemy)
New Joint Stock—
Association of British Chemical Manufacturers, 71
Blakeborough, J., & Sons, 615
British Gas Purifying Materials Company, 36
Gas Developments, 426
Lumina Limited, 429
Meade-King, Robinson, & Co., 482
Selas-Turner Company, 622
Shields and Ramsay, 260
Ward, W. A., & Co., 311, 372
Wound Up, 37, 164, 263
Comroy, Mr. J. P., on Maintenance of Burners, 261
Construction Companies, Gas Undertakings and, in Massachusetts, 340
Consumers—
Profit Sharing by, in Chicago, 569
Reducing the Proportion of Unprofitable, 506
Contracts—
As Affected by the Ministry of Munitions Order, 519
Coal (*see* Coal)
Sulphate of Ammonia, 620
Conveyors, Belt, 19
Cooking by—
Electricity—
Bullard, Mr., on, 153
Electricians' Claims, 246
Large Installation at Newcastle, 291
Nobbs, Mr. C. G., on, 27
Price of Current for, 108
Gas *v.* Electricity, 290
Cookstown, Gas Explosion at, 367
Co-Partnership Schemes and War Savings Certificates, 122
Copp's, Mr. Harold E., Apparatus for the Estimation of Benzol and Toluol in Coal Gas, 505
Cork Gas Company, 478
Cotton, Mr. H. F., on Industrial Heating, 417
Coventry Gas Undertaking—
Calorific Standard Application, 249
Official Change, 246, 595
Creda Electric Fire, 338
"Cricket" on—
Gas Works and Peace, 104, 109
Oil Washing Plants after the War, 507
Cromer Gas Company, 572
Crook (Co. Durham) Gas Company, 221
Cross, Mr. Reginald, on Tar, 553, 561
Crowborough Gas Company—
Calorific Power Application, 58
Installation of Dr. Lessing's Oil Scrubbing Plant, 456
Croydon, Gas Tragedy at, 316
Croydon Gas Company—
Comments, 393
Meeting of Shareholders, 418
Report and Accounts, 372
Cunnington, Mr. Arthur, on Intrinsic Brilliancy and Accurate Measurement, 502, 519, 565
Cupar Gas Works Vertical Retort Installation, 157
Cyanogen, Utilization of, 355

"Daily Telegraph" on Gas for Metal Melting, 123
Darlington Gas Undertaking—
Accounts, 81
Output, 522
Profits, 622
Dartmouth Gas Company, 622
Davis, Mr. E. F., on Industrial Processes and Appliances Using Gas, 22
Davis Gas Stove Company, 574, 616
Daylight Saving (*see* Summer Time)
Dayton, Pushing Electric Power Plant in, 291
Deal and Walmer Coalfields, 529
Deaths—
Blandy, H. Bilson, 14
Browning, Major R. G. S., 595
Buckley, William Charles, 595
Chapman, J. L., 14
Cliff, Walter, 451
Constam, Dr. E. J., 394
Dasnieres, Sergt. Charles, 151
Dawes, Samuel, 14
Evans, William, 107
Ewing, William, 151
Forrest, James, 451

Deaths (*continued*)—
Fyffe, Andrew Morton, 150
Hempel, Dr. Walther, 107
Hickman, H. T., 193
König, W., 107
Laughlin, James A., 503
M'Court, Lieut. Cyril D., 595
MacKay, Archibald, 290
Mason, James, 193
Mayer, Max, 193
Morgan, Walter, 337
Myers, J. Napier, 337
Oliver, Frank, 193
Paterson, Mrs., 14
Piper, J. T., 14
Pollack, Maurice, 246
Porter, Francis H., 556
Priestman, Thomas E., 595
Rhodes, H. B., 14
Thomas, J. Langdon, 337
Thorpe, R., 615
Townsend, Mrs., 60
Trechmann, Otto K., 151
Winstanley, Mrs., 14
Defence of the Realm Manual, 109
Departmental Harmony, Need of, 404
Deptford—
Councillor and Underground "Gasometers," 264
Street Lighting, 482, 555
Derby Gas Company—
Meeting of Shareholders, 425
Report, 313
Show Rooms, 18, 298
Diesel Engine Users' Association, 104, 155
Differential Prices for Electricity, 291 (*see also* Hackney)
Directors of Gas Companies, Length of Service of, 526, 565
Distribution, Low Pressure, Mr. W. Marsh Hampton on, 509
Dividend, Preservation of the Standard Rate of, 551, 565, 594, 614
Doncaster Gas Undertaking—
Gas Pressure, 314
Wages Increases, 223
War Bonus, 314
Worker Prosecuted for Neglect, 619
Donkin, Bryan, Research Legacy, 349
Dover Gas Company, 529, 620
Downing and Pohlman, Messrs., on Cracking Gas Oils in Various Atmospheres, 24
Dresser Couplings for Cast Iron Pipes, 117
Drew, Mr. W. N., on the Rectification of Benzol, 201, 514
Drogheda Gas Undertaking—
Coke Prices Question, 83, 621
Financial Position, 621
Successful Working, 36
Droitwich Gas Undertaking, 373
Drying, Gas for, 515
Dublin—
Fatal Burning Accident in, 26
Gas Company (*see* Alliance)
Public Lighting Question, 163, 264, 371
Dudley Gas Stokers Summoned for Neglect of Work, 128
Dudley Street Lighting Question, 83
Dufton, Dr., on Smoke Abatement, 308
Dukinfield Gas Prices, 223
Dumbarton Gas Undertaking, 369, 451, 480, 595
Dundalk Electricity Undertaking, 247, 424
Dundee Gas Undertaking—
Visit of the Scottish Junior Association to the Tar Distillation Works, 411
Women Stove Cleaners, 428
Work in the Engineer's Office, 411
Workers and Leaving Certificates, 369
Dunfermline—
Quality of the Gas at, 169
Vertical Retort Installation, 369
Durham Gas Company, 263
Dursley Gas Company, 360
Dye Industry—
India and the, 506
Switzerland and the, 126

Earle, Mr. W. H., on Reducing the Water Content of Tar, 503
East Grinstead Council and the Calorific Standard, 122, 147, 310
East Grinstead Gas and Water Company, 425
Eastbourne Corporation and the Calorific Value Question, 27
Eastbourne Gas Company, 482
Edinburgh, Proposed Extension of Automatic Lighting in, 572
Edinburgh and Leith Gas Commissioners—
Air Raid Warning, 476, 618
Annuities, 477
Decreased Gas Sales, 262
Early Days of the Gas Undertaking, 219
Separation Allowances, 618
Wages Question, 260
War Loan Investment, 262
Education, The Value to Industry of Science in, 55, 122
Edwards, Mr. J. D., on an Accurate Method of Determining the Specific Gravity of Gases, 115
Egloff and Moore, Messrs., on the Production of Benzene and Toluene, 150
Electricians—
And Share Investments in Customers' Business, 453
Opinions on the Gas Industry, 453
Electricity—
Architecture and, 196
Companies' Working Results and Prices, 152
Deficits, Ratepayers and, 504
Differential Prices for, 291 (*see also* Hackney)
Eyestrain and, 453
Failures, 59, 195, 368, 374, 504
Fire Risks and Dangers of, 59, 339, 399, 505, 555, 598, 622
Future of, 107
Gas for Generating, 555
Heating Business Cultivation, 452
Industry and Organization, 243, 247, 453
Interlinking Schemes, 59, 153, 555, 597
Nitro Energy Scheme, 59
Power—
Board of Trade Committee on, 617
Pushing Plant in America, 291
Regulations, 107, 338
Restrictions, 58
Retrospect of 1916, 15
War Losses, 554
Electro Culture, 597
Elland Gas Company—
Accident at the Works, 223
Military Service Appeal, 130
Vertical Retort Installation, 414
War Loan Investment, 315
Ellesmere Gas Undertaking—
Application for Suspension of the Sinking Fund, 161
Deficit, 130
Increase in Price, 571
Ellis and Paterson's Electric Fire, 338
Empire Resources Development Committee, 193
Employers' Parliamentary Council, 289
Employment under the Munitions of War Acts, 503
Enemy—
Companies, Winding Up—
Brimsdown Lamp Works, 373
Coal Distillation Company, 373
Mantle Seizures, 469
Patent Litigation—
Bye Product Plants, 216, 359
Electric Water Heaters, 338
Engineers, Corporation and Gas Company, 557
Engines—
Diesel, Tar Oils for, 104, 155, 428
Gas—
In Mills, 298
Lubrication of, 158
Etchells and Greaves' Electric Furnace, 453
Eticol Syndicate, 263
European Gas Company, 246
Examinations, London and Southern Junior Gas Association Discussion on, 70
Exeter City Council and Calorific Power, 165
Exeter Gas Company, 359, 476
Explosions—
East London Chemical Factory, 151
Electric Main, 130
Gas, 262, 265, 367, 414, 429
Exports—
Coal and Coke, 154, 336, 553
Sulphate of Ammonia, 19, 505
Eyesight, Effect of Lights on, 394, 406, 453

Factory Lighting, 121, 158
Falkirk Gas Works, Visit of the Scottish Junior Gas Association to, 515
Falmouth Gas Works, Accident at, 426
Faraday Society Discussion on the Training and Work of the Chemical Engineer, 521
Fearnsides, Mr. W. G., on Some Physical Properties of the Two Chief Mineral Constituents of Coke Oven Bricks, 244, 253
Fertilizers (*see also* Sulphate of Ammonia)—
Appointment of a Committee on, 104, 125, 146, 223
Food Production and, 14, 35
Prothero, The Right Hon. R. E., on, 172, 196
Russell, Dr. E. J., on, 297
Fife Coal Company, 356
Fire, Cases of—
Bradford (Low Moor) Gas Works, 423
Coke Heap at Old Kent Road Gas Works, 27
Hazelbeech Hall, 505
Merthyr Electric Works, 172
New York Statistics, 249
Warrington Gas Works, 128
Fire Clay Mines, Government and, 595
Fires—
Electric—
Cost of, 196, 399
Efficiency of, 556
Gross Artificiality in, 399
New, 338
Gas—
Burning Fatality Caused by, 264
Construction of, 113, 250
Effect of Cold Weather on the Demand for, 393
Electrician's Views on, 398
Fog, Effect of, on Gas Consumption, 13, 37
Food Economy—
British Commercial Gas Association and, 287
Value of Gas Cooking, 290
France—
Coal Question in, 37, 344
Lighting Restrictions in, 59, 105, 122
Fraser, Mr. T., on Bricklaying in Relation to Gas Making, 408
Fraud and Bribery Charges in Connection with Gas Globe Deliveries, 148, 164
French and Van Gieson, Messrs., on Dual Lighting Systems for the Home, 254
Frost, Gas as a Remedy for Burst Pipes during, 290
Fuel Economy—
Armstrong, Prof. H. E., on, 13
Briquettes and, 19, 206, 258
British Commercial Gas Association and, 287
Cobb, Prof. John W., on, 596
Editorial Comments, 449
Electrician's Views on, 246
Glover, Mr. Thos., on, 613
Producer Gas and the Utilization of Coke Dust or other Low Grade Fuel, 593, 607
Research Committee, 449, 469
Furnaces—
Electric, Developments of, 195, 453
Gas—
Editorial Comments, 593
Exhibition at Dublin, 368, 417
Metal Melting by, 123, 405
Monometer, 405
"Times" Engineering Supplement on, 219
Town Gas and, 149, 155, 217, 609
Fyfe, Sheriff, on Employers and Workmen under the Munitions of War Acts, 503

Galloway, Dr. Lee, on Training of Employees, 154
Garw and Ogmore Gas Company, 478
Gas—
Account, Married Woman's Liability for, 148, 163
An Early Publication on, 223, 291
Artificial Drying by, 515
As a Lighting Agent, Prof. Armstrong on, 56
Cost of, per 1000 Candle Hours, Compared with other Illuminants, 212
Electricity *v.*, Comparative Cost and Efficiency of, 195
Estimation of Sulphur in, 76
Extracting Vaporous Constituents from, Dr. Lessing on, 146, 159, 296, 334, 347, 557
Failures, 262, 315, 370, 422
Importance of Maintaining Uniform Quality of, 116
Industrial Processes and Appliances, 22, 112
Industry, Vitality of the, 192
In Relation to Modern Business, 373
Safety Code, 603
Use of, and Its Influence on Domestic Architecture, 114
Gas Associations, Report of Proceedings of, 296
Gas Developments, Limited, 426
Gas Fitters' Classes at Westminster Technical School, 574
Gas Industry and—
Chemical Organizations, 103
Patriotism, 392, 502
Gas Light and Coke Company—
Bill, 17, 266, 308, 566, 615
Death of an Old Official, 337
Death of a Woman Worker, 480
Dependant's Action for Alleged Negligence, 414
Dividend, 150
Editorial Comments, 189, 286
Governor's Greeting to Co-Partners, 81
Hackney Electricity Charges (*see* Hackney)
Increase in Price, 451
Meeting of Shareholders, 303
Report and Accounts, 193
Residual Sales Department Appointment, 14
Retirements—
Milne, Mr. Thomas, 14
Orford, Mr. G., 503
Statue of Sir Corbet Woodall, 287
Women Workers, 262
Working Results, 396, 397
Gas Manufacture, Sardinian Lignites in, 467
Gas Works—
German, in War Time, 450, 454, 508
Nuisance Caused by, 619
Practice—
Modern, 400
Under War Conditions, 593, 609
"Gascolite," Liability for an Accident with, 259, 359, 415
Gases, Power Composition of, 516
Gasholder, Interesting History of a, 313
Gasholders, Suggestion for Underground, 264
Geneva Gas Supply, 558
Germany—
Coal Prices in, 119
Distillation of Brown Coal in, 159
Gas Consumption Restrictions in, 395
Gas Works in War Time in, 450, 454, 508
Geyser Ventilation Flues, Danger of Faulty, 572
Girard and Lauriol, Messrs., on the Measurement of the Calorific Power of Gas, 202
Glasgow Gas Foremen's Association, 217
Fraser, Mr. T., on Bricklaying in Relation to Gas Making, 408
M'Isaac, Mr. John, on Town Gas for Industrial Purposes, 217
Glasgow Gas Undertaking—
Meter Testing, 369
Water Gas Plant, 622
Women Workers, 478
Glass and Optics, Research in, 298
Gloucester Gas Company, 478
Goole Gas Coal Contract, 161
Goring Gas and Water Company to be Wound Up, 37, 164
Gorleston Calorific Power Order, 109

Gosport Gas Worker Fined for Neglect, 519
Govila, Mr., on India and the Coal Tar Dye Industry, 506
Granger, Mr Allan, on Weights and Measures, 121
Grantham Gas Company, 314, 566
Greaves and Etchell's Electric Furnace, 453
Greenock Gasholder History, 313
Grey, Mr. H. A. B., on Gas and Modern Business, 373
Guildford Gas Company's Calorific Standard Application, 150

Hackney, Appeal for Funds in Connection with Alleged Preferential Charges for Electricity at, 83, 107, 126, 399, 528, 554, 597, 622
Halifax Gas Undertaking—
  Accounts, 81
  Benzol Recovery Plant, 529
  Engineer and Manager's Salary, 290
  New Charges, 261, 474
  Proposed Extensions, 130
Halliwell, Mr. S. E., on Gas Works Employees and War Savings, 339
Hamilton, Mr. W. Marsh, on Low Pressure Gas Distribution, 509
Hamilton Gas Works, 411
Harrogate Calorific Power Order, 249, 482
Harrogate Electricity Undertaking Steam Plant, 374
Harrow and Stanmore Gas Company—
  Funeral of Mr. J. L. Chapman, 14
  Meeting of Shareholders, 523
  Official Changes, 107
Hartlepool Gas and Water Company, 151
Hartley and Thornton, Messrs., on Metal Melting, 601
Harwich Gas Company, 479
Haslemere Gas Bill, 17
Hastings and St. Leonards Gas Company, 14, 526
Hastings Town Council and Calorific Value Applications, 27
Haverhill, Failure of the Gas Supply at, 422, 622
Hawkhurst Gas Works, 503
Heat, Waste, from Retort Benches for Steam Raising, 249
Heaters, Gas, Danger of Inefficient, 362, 429
Heating—
  Electric, Cost of, 196, 399
  Electrician's Claims, 247
  Gas *v.* Electric, 152
Hebden Bridge and Mytholmroyd Gas Board—
  Chairmanship, 622
  Decreased Make, 170
  Military Service Appeal, 130
Heckmondwike Gas Works, 14
Hemel Hempsted Gas Bill, 17, 261
Henderson, Prof. G. C., on the Chemist and the Gas Industry, 190, 213
Henley Street Lighting, 27
Herring, Mr. W. R., on—
  Candle Power and Calorific Values, 413, 468
  Work of the Institution of Gas Engineers, 391, 413
Hewett, Mr. J., on Combustion Methods for Use in the Laboratory, 56, 72
High Wycombe Gas Company, 524
Hocking, Mr. W. J., on Metal Melting at the Royal Mint, 598
Holbrook, Mr. E. A., on Illinois Coal, 111
Hollingworth, Mr. D. V., on Occurrences in the Coke Oven during Carbonization, 191, 197
Home Office—
  Mines and Quarries Report, 456
  Summer Time Committee's Report, 500, 520
Horley Gas Company, 566
Hornsey Gas Company, 472
Howard, Mr. A. C., on the Importance of Maintaining a Gas Supply of Uniform Quality, 116
Huddersfield St. Andrew Society, 373
Humphrys, Mr. Norton H., on—
  Settle-Padfield Retort and the Vertical System, 299
  Vagaries of Public Lighting Restrictions, 250
Hungerford Gas Works, 503
Hutchinson, Mr. J. A., Bankruptcy of, 123
Huttner and Mylius, Messrs., on Estimation of Sulphur in Coal Gas, 76

Ilford Council and the Calorific Value Question, 27
Ilford Gas Company, 246, 622
Ilfracombe Gas Company, 107, 528
Illinois Coal, 111
Illuminating Engineering Society—
  Correspondence, 519
  Editorial Comments, 147, 394
  Kerr, Dr. James, on Lights and Eyesight, 394, 406, 502, 519
  Morris, Prof. J. T., on the Lumen as a Measure of Illuminating Power, 147, 160
  Willcox, Mr. F. W., on the Lumen as a Measure of Illuminating Power, 147, 160
Illuminating Engineering Society (American)—
  Factory Lighting Discussion, 158
  French and Van Gieson, Messrs., on Dual Lighting Systems for the Home, 254
Illuminating Power, The Lumen as a Measure of, 147, 160
Illumination and Architecture, 196
Import Restrictions on Mantles, 509
Incandescent Gas Lighting—
  Maintenance in New York, 261
  Mantles (*see* Mantles)
Income Tax—
  Directors' Fees and, 263
  Municipal Profits and, 27, 60, 573
  Report of the Commissioners of Inland Revenue on, 552
Increases in the Price of Gas, 81, 83, 161, 223, 261, 286, 371, 423, 426, 451, 527, 528, 570, 571, 572 (2), 573 (2), 619
India and the Coal Tar Dye Industry, 506
"Indiaman" on the Travancore Monazite Deposits, 218
Industrial Processes and Appliances Using Gas—
  Cotton, Mr. H. F., on, 417
  Davis, Mr. E. F., on, 22, 112
  Editorial Comments, 593
  Jones, Mr. George B., on, 593, 609
  M'Isaac, Mr. J., on, 217
Ingrow, Gas Suffocation Case at, 367
Inland Revenue Commissioners' Report, 552
Institute of Metals—
  Brook, Mr. G. P., on Coal Gas for Melting Non-Ferrous Alloys, 599
  Hocking, Mr. W. J., on Metal Melting at the Royal Mint, 598
  Thornton and Hartley, Messrs., on Metal Melting, 601
  Walter, Mr. C. M., on Metal Melting by High Pressure Gas, 599
Institution of Civil Engineers, 451
Institution of Gas Engineers—
  Council Meeting, 294
  Date and Programme of Annual Meeting, 288, 294, 338
  Editorial Comments, 391, 551
  Herring, Mr. W. R., on the Work of the, 391, 413
  Naphthalene Stoppages Brochure, 551, 554
  Suggested Paris Meeting, 258
  "Transactions," 152
Ipswich Gas Company, 427, 572
Iron, Electric, Fire Danger of, 505

Jarrow Gas Works, Accident at, 83
Johnston, Mr. R. S., on Work Carried Out in the Gas Engineer's Office at the Dundee Gas Works, 411
Jones, Mr. D. Trevor, on Thermal Decomposition of Low Temperature Coal Tar, 198
Jones, Mr. George B., on Gas Works Practice under War Conditions, 593, 609
Jordan, Mr. H. W., on Registration of Business Names, 196
"JOURNAL," The—
  Of Sixty Years Ago, Extracts from, 194, 411, 556
  Title, "Electrician" and, 108
Journal of the Board of Agriculture on Farmers and Sulphate of Ammonia, 124
Junior Institution of Engineers—West, Mr. R. D., on Trade Wastes, 413

Keighley Gas Undertaking—
  Military Age Appointment, 478
  Official Change, 246, 478
  War Bonus, 223
Kendal Gas Works, 193, 519
Kenilworth Gas Company's Bill, 61, 262
Keppelmann, Mr. D. E., on an Improved Make of Slide Valve, 355
Kerr, Dr. James, on Lights and Eyesight, 394, 406
Kerr, Mr. W. T., on Electro Culture, 597
Kershaw, Mr. J. B. C., on Coke and Coke Breeze for the Generation of Steam, 161
Kingston-on-Thames Gas Company, Calorific Power Order, 404
Kirkby-in-Ashfield Gas Supply, 367
Kirkintilloch Gas Works, 451, 595
Kitchen, The All Gas, 606
Knublauch, Dr., on Estimation of Naphthalene by Picric Acid, 64
Koppers Recovery Plant Patent Litigation, 216
Körting, Mr. E., on Gas Works in Germany in War Time, 450, 454, 508
Kummel and Teune, Herren, on Distillation Process in the Vertical Retort, 248, 341

Laboratory, Combustion Methods for Use in the, 56, 72
Labour Questions—
  Absenteeism in the Coal Trade, 244
  Gas Workers Summoned for Neglect, 128, 302, 371, 519, 619
  Leaving Certificates, Gas Workers and, 369
Laclede Gas Light Company, 169
Lamps, Electric, Litigation, 108
Lancashire and Cheshire Electricity Supply Interlinking Schemes, 555, 597
Lancaster Gas Undertaking, 266, 474
Lantsberry and Paton, Messrs., on Fuel Economy and Briquettes, 19
Launceston Gas Company, 305
Lauriol and Girard, Messrs., on Measurement of the Calorific Power of Gas, 202
Lea Bridge Gas Company—
  Bill, 61
  Calorific Power Order, 109, 165
  Consumers' Liability for Gas Account, 148, 163
  Meeting of Shareholders, 567
Lead, Restrictions in Dealing in, 315
Leakage Caused by Artillery Practice, 150
Leamington Priors Gas Company's Calorific Power Order, 354
Leask, Mr. E. A., on Town Gas and Industrial Furnaces, 149, 155
Leaving Certificates, Gas Workers and, 360
Lee, Mr. J. D., on Gas Lighting for a Cathedral, 16
Leeds—
  Gas Explosion in, 265
  Gas Fatality in, 622
Leeds Gas Department—
  Calorific Power Order, 216
  Death of an Official, 14
  Leech, Mr. W. B., and a Government Appointment, 58
  Popularizing Gas Fires, 82
  Staff and the War, 58
  Toluol Plant, 162
  War Bonus, 522
Leicester Gas Profits, 524, 571
Lesher, Mr. C. E., on Coke Production in America, 201
Lesher and Smith, Messrs., on Cost of Coal in the United States, 78
Lessing, Dr. R., on Extracting Vaporous Constituents from Gas, 146, 159, 296, 334, 347, 456, 557
Leven, Automatic Lighters at, 83
Lichfield Gas Company, 570
Light—
  Comparative Cost of, Per 1000 Candle Hours, 212
  Comparison of Gas and Electric, 394, 502, 519, 565
  Effect of, on Eyesight, 394, 406, 453
  Intrinsic Brilliancy of Gas and Electric, 502, 519, 565
Lighting—
  Business, Retaining, in America, 565
  Curtailment of, during the War—
    Accidents Caused through, 27, 359, 519
    Birmingham and, 77, 83
    Burnley and, 171
    Cardiff City Council and, 130, 221
    Economy of, 83
    French Government and, 59, 105, 122
    Henley Town Council and, 27
    Lighting Contracts, Westminster City Council and, 422
    London Order, 217, 469
    Manchester Corporation and, 169
    "Municipal Engineering" on, 80, 127, 305
    Parliament and, 519
    Vagaries of the Restrictions, 250
  Dual Systems of, for the Home, 253
  Factories—
    British Commercial Gas Association and, 121
    In America, 158
  Gas—
    An Early Publication on, 223, 291
    Flood, 201
    For Cathedrals, 16
  Power and Varying Calorific Values, 308, 356, 391, 398, 468, 501, 553, 558
  Public, after the War, 571
Lignites, Sardinian, in Gas Manufacture, 467
Lincoln Gas Supply, 305
Lisburn Gas Undertaking and Maximum Prices, 172, 314
Lisher, Mr. J. E., on Modern Coal and Coke Handling Machinery, 296
Liverpool Electric Main, Explosion in, 130
Liverpool Gas Company, 415
London (*see also* London County Council)—
  A Plea for More Light in, 221
  Comparative Working Results of the Gas Companies in, 396, 397
  Lighting Order, 217, 469
  Suggested Lighting Control in, 127
London and North-Western Railway and the Calorific Standard Question, 308, 356, 391, 398, 501
London and Southern Junior Gas Association—
  Discussion on Gas Salesmen and Gas Examinations, 70
  Editorial Comments, 56
  Hewett, Mr. J., on Combustion Methods for Use in the Laboratory, 56, 72
  Questions and Answers, 70
London County Council—
  Gas Light and Coke Company's Bill, 266, 308
  Westminster Technical School Gas Fitters' Classes, 574
London Safety First Council, 429
Londonderry, Increase in Price at, 83
Longwood and Slaithwaite Gas Company, 478
Los Angeles, Domestic Fuel from Retort Carbon at, 556
Lostwithiel Gas Company, 302
Loughborough Gas Undertaking, 77, 310
Lower Saxony Association of Gas and Water Engineers, 115
Lumen as a Measure of Illuminating Power, 147, 160
"Lumen" on Corporation and Gas Company Engineers, 557
Lumina Limited, 429
Lurgan Gas Profits and Income Tax, 27
Lytham Gas Works, Breakdown at, 415

M'Isaac, Mr. J., on Town Gas for Industrial Purposes, 217
Maclaurin's Low Temperature Carbonization Process, 517
Magherafelt Gas Works, 151
Magnesite and Magnesite Products Restrictions, 121

Magnesite Bricks, Spalling of, 560
Maidenhead Gas Company's Calorific Standard Application, 109
Maidstone Gas Company, 571
Mains (*see* Pipes)
Maintenance of Gas Fittings and Burners in America, 565
Malmesbury Gas Company, 503
Malton Gas Company, 315
Manchester Corporation—
  Lighting Deputation, 222, 302
  Profits on Trading Departments, 221, 527
  Wages Allowances, 129, 307
Manchester District Institution of Gas Engineers—
  Corrections, 565, 615
  Editorial Comments, 447, 449, 450
  General Business, 457
  Mottram, Mr. A. E., on the Ossett Tar Dehydration and Debenzolizing Plant, 449, 464
  Presidential Address of Mr. W. Whatmough, 447, 450, 458
Manchester Electricity Undertaking, A General Manager for, 479
Manchester Gas Undertaking—
  Day Consumption Developments, 165
  Deputy Chairmanship, 151
  Engineership, 258, 308
  Fatality at Rochdale Road Works, 479
  Fog and Consumption, 37
  Income Tax Adjustment, 573
  Lighting Restrictions, 165, 169
  Meter Testing Question, 77
  Presentation to a D.C.M. Worker, 261
  Profits, 221, 502, 527
  Public Lighting, 222
  Purifier Men Summoned for Breach of Contract, 302
  Salaries and Wages Question, 129, 307, 526
Manchester Junior Gas Association—
  Comments, 288
  Mooney, Mr. F. F., on Coal Tar Analysis, 255, 288
  Visit to the Oldham Gas Works, 252
Manchester University Tar Tests, 615
Mantles—
  Artificial Fibre, 117
  British Manufacturers of, 374
  Cheap, *v.* Maintenance in America, 297
  Commercial Value of Different Qualities of Gas for, 553, 558
  Import Restrictions on, 509
  Ironmongers, Trade Brand of, 222
  Metals for, 120
  Seizure of, 469
Marine Engineers' Institution, 158
Marlow Gas Company, 421
Marsh and Walter, Messrs., on New Methods of Measuring Gas under Varying Conditions of Temperature and Pressure, 335, 350
Maryhill, Gas Explosion at, 262
Marylebone Electricity Undertaking, 106, 129
Masonic, 392, 399, 463, 556
Massachusetts, Gas Undertakings and Construction Companies in, 340
Matlock and District Gas Company, 428
Maw, Mr. P. T., on Fertilizers and Food Production, 14
Meade, Mr. Alwyne, on Modern Gas Works Practice, 400
Measurement of Gas (*see* Meters)
Meetings of Gas Shareholders, Annual, 289
Melbourne Metropolitan Gas Company, 259, 524
Mellor, Dr. J. W., on—
  Refractories, 362
  Spalling of Magnesite Bricks, 560
Melton Mowbray Gas Company, 370
Merrells, Alderman, and the Patriotism of the Gas Industry, 392, 502
Merthyr Electric Light Works, Fire at, 172
Metal Melting by Gas—
  Brook, Mr. C. B., on, 599
  "Daily Telegraph" on, 123
  Editorial Comments, 593
  Fifty Years Ago, 109
  Hocking, Mr. W. J., on, 598
  Surface Combustion, Appliance for, 298
  Thornton and Hartley, Messrs., on, 601
  Walter, Mr. C. M., on, 599
Metal Trades in 1916, Messrs. Bolling and Lowe's Report on, 109
Meter for the Laboratory, 298
Meters—
  Electric, Testing of, 555
  Gas—
    New Coinage and, 315
    Testing Question at Manchester, 77
    Walter and Marsh, Messrs., on, 335, 350
Metropolitan Gas Referees' Notification for 1917, 16
Michigan Gas Association and Advertising, 57
Middleton Gas Undertaking and Women Labour, 119
Midland Association of Gas Engineers and Managers—
  Chaney, Mr. W., on Producer Gas and the Utilization of Coke Dust or other Low Grade Fuel, 593, 607
  Coal Question, 604
  Editorial Comments, 591, 593
  General Business, 604, 606
  Presidential Address of Mr. George Stevenson; 591, 605
Midland Institute of Mining, Civil, and Mechanical Engineers—
  Drew, Mr. W. N., on Benzol Rectification, 201, 514
  Yeadon, Mr. J. A., on Briquette Making, 206
Midland Junior Gas Association—
  Editorial Comments, 191, 335, 593
  Jones, Mr. George B., on Gas Works Practice under War Conditions, 593, 609
  Rhead, Mr. T. F. E., on Some Physico-Chemical Considerations on Benzol Recovery from Coal Gas, 191, 207
  Walter and Marsh, Messrs., on New Methods of Measuring Gas under Varying Conditions of Temperature and Pressure, 335, 350
Military Service—
  Certified Occupations, 244, 293, 354
  De-badging Gas Workers, 57, 58, 192, 286, 293
  Employers and Eligible Men, 13
  Exemption Applications, 130, 161, 369, 374, 417, 452, 475, 476, 479, 482, 573, 617, 619
  Leaving Certificates, Gas Workers and, 369
  Lists of Employees, 149
Mills, Gas Power in Lancashire and Yorkshire, 298
Mines and Quarries Report, 394, 456
Ministry of Munitions—
  Contracts as Affected by Orders from, 519
  Priority Department, 451, 560
Modern Gas Works Practice, Mr. Alwyne Meade on, 400
Monazite—
  In Ceylon, 506
  Travancore Deposits, 218
Monifieth Gas Management, 481
Monometer White Metal Furnace, 405
Montgomery and Co.'s Report on the Nitrate of Soda Market, 19
Mooney, Mr. F. F., on Coal Tar Analysis, 255, 288
Moore and Egloff, Messrs., on the Production of Benzene and Toluene, 150
Morley Gas Department, 302
Morris, Prof. J. T., on the Lumen as a Measure of Illuminating Power, 147, 160
Motors, Pushing Electric, in America, 291
Mottram, Mr. A. E., on a Tar Dehydrating and Debenzolizing Plant, 449, 464
Municipal Corporations Association and Liability for Damage Caused by Burst Gas Pipes, 81
Municipal Engineering and Sanitary Record on the Lighting Restrictions, 305
Municipal Gas Engineers, Protection for, 450
"Municipal Journal" on the Calorific Standard Act, 373
Munitions of War Acts, Employment under the, 503
Mylius and Huttner, Messrs., on Estimation of Sulphur in Coal Gas, 76
Mytholmroyd, Gas Bracket Heater Fatality at, 429

Names, Registration of Business, 196
Naphthalene—
  Estimation of, by Picric Acid, 64
  Institution of Gas Engineers' Brochure on, 551, 554
National Commercial Gas Association's Publicity Scheme in Connection with Lighting, 22
National Gas Council of Great Britain and Ireland—
  Calorific Power Standard Orders, 293
  Certified Occupations, 293, 354
  Coal Contracts, 591, 594
  Coal Screening Question, 293
  Debadging Gas Workers, 57, 58, 286, 293
  Editorial Comments, 286
  Executive Committee's Report, 293
  Research and Education, 293
National Insurance Act Umpire's Decisions, 58
National Service, 405, 506
National Steam Car Company, 423
Natural Gas—
  American Statistics, 158
  As Boiler Fuel, 115
New Brunswick, Shale Oil in, 509
New England Association of Engineers—
  Clark, Mr. J. C. D., on Retaining Gas Lighting Business, 565
  "Transactions," 514
New Jersey Gas Company and Cyanogen Recovery, 355
New Year's Honours, 290, 337, 451
New York, Causes of Fire in, 249
New York Consolidated Gas Company, 474
New York General Gas Company and Burner Maintenance, 261
New Zealand—
  British Gas Lighting Goods in, 35
  Refractory Material Deposits in, 169
Newark Gas Company, 556, 615
Newcastle (N.S.W.) Gas Company's Jubilee, 311
Newcastle-on-Tyne Gas Company—
  Annual Report, 307
  Dividend, 223
  Meeting of Shareholders, 367
Newmarket Gas Company, 476, 481
Newport (Mon.) Gas Company—
  Calorific Power Application, 58
  Meeting of Shareholders, 313
  Staff and the War, 556
Newry Gas Undertaking, 314
Newton, Mr. Thos., on—
  Gas Fire Construction, 250
  Use of Gas and Its Influence on Domestic Architecture, 114
Newton-in-Makerfield Gas Works Extensions, 374
Nichol, Mr. J., on Illumination and Architecture, 196
Nitrate Statistics for 1916, 19, 167
Nitration of Toluene, 116
Nitre Cake, Possible Partial Substitution of, for Sulphuric Acid in the Manufacture of Sulphate of Ammonia, 334, 345, 552, 569
Nitric Acid, Transformation of Ammonia to, 26
Nitro-Energy Electricity Scheme, 59
Nitrogen and Calorific Power, 147
Nitrogen Products and Carbide Company, 553
Nobbs, Mr. C. G., on Electric Cooking, 27
North Middlesex Gas Company, 523
Northallerton Gas Manager and Military Service, 617
Northwich Gas Company, 469
Norton, Mr. Kenneth, on Correction of Thermometers in the Determination of Boiling Point, 110
Norton's, Mr. T. H., Coal Tar Colours Chart, 249
Norway, Requisition of Gas Works Coal Stocks in, 264
Nottingham Gas Undertaking—
  Increased Prices for Gas, 34, 81
  Stove Fixing Charges, 222
Nuisance Caused by Gas Works, 619
Nuremberg Gas Works, 193, 560

O'Shea, Prof. L. T., on the Organization of the Coking Industry, 12, 20, 75
Oakham Gas Company, 193, 451
Official Changes—
  Ball, W. W., 107
  Barbour, James, 595
  Bastow, S. E., 218
  Bell, James, 451
  Belton, J. C., 193, 246, 421
  Braidwood, J. F., 451
  Bunting, John H., 218
  Chambers, Charles, 107
  Cookson, D., 503
  Craig, Alderman James, 337
  Dickson, James, 595
  Dougall, Andrew, 106, 337
  Duxbury, T. H., 395
  Ellershaw, R. P., 246
  Higham, Harold, 595
  Holliday, Herbert B., 246
  Hunter, Robert, 556
  Hyde, J. B., 503
  Ineson, J. S., 395
  Jesty, W. M., 595
  Jones, D., 337
  Jones, George B., 595
  Langford, Leonard J., 395
  Laughlin, J. A., 337
  Milne, Thomas, 14
  Newbigging, William, 258, 308
  Noble, J. H., 193, 246
  Olliver, J. H., 14
  Orford, George, 503
  Penney, J. H., 395
  Phillips, John, 395, 571
  Pickering, A., 395
  Ransome, J. A., 14
  Rumble, L. A., 58
  Shadbolt, Thomas, 193
  Shepherd, H. C., 106
  Slack, Arthur, 14
  Slack, J. W., 14
  Sugden, J. M., 503
Oil, Shale—
  American, 120
  In New Brunswick, 509
Oil Washing of Coal Gas (*see* Benzol Recovery)
Oils, Gas—
  Cracking, in Various Atmospheres, 24
  In the United States, 249
Oke, Mr. A. W., on the Bicentenary of Thomas Gray, 220
Oldbury Gas Undertaking—
  Manager's Salary, 482
  Output, 264, 299
  War Savings Association, 482
Oldham Gas Undertaking—
  Reduced Consumpton, 123, 620
  Visit of the Manchester Junior Gas Association to the Works, 252
Omagh Gas Supply, 373
Organization—
  Benn, Mr. E. J. P., on, 155
  Chemical Industry and, 71, 103, 149
  Coking Industry and, 12, 20, 75
  Electrical Industry and, 243, 247, 453
  Sulphuric Acid Makers and, 57, 103
Osborn, Mr. F. A., on the Cost of Electrically Heating Dwellings, 196, 399
Ossett Gas Undertaking—
  Tar Dehydrating and Debenzolizing Plant at, 449, 464
  Women Labour, 80
  Workers' Wages, 374
Otley Gas Company, 425
Otto Coke Oven Company, 314
Ovens, Bakers', Surface Combustion for, 64

Pacchioni, Signor A., on Sardinian Lignites in Gas Manufacture, 467
Pacific Coast Gas Association, 246
Padiham, Quality of the Gas at, 264
Paris Municipality's Method of Measurement of the Calorific Power of Gas, 202
Parliament (*see* Parliamentary Intelligence, p. xi.)
Parrish, Mr. P., on the Possible Partial Substitution of Nitre Cake for Sulphuric Acid in the Manufacture of Sulphate of Ammonia, 334, 345

Patents (*see also* Register of Patents, p. x.)—
  Digest of Cases (Underhay), 63
  Enemy (*see* Enemy)
Paton and Lantsberry, Messrs., on Fuel Economy and Briquettes, 19, 258
Personal Paragraphs—
  Baker, Hamilton, 58, 77
  Birchenough, Sir Henry, 193
  Bray, Captain George, 106
  Brown, Second-Lieut. J. W., 106
  Browning, Second-Lieut. R. A., 106
  Burtles, Alderman Richard, 151
  Calthrop, Guy, 340
  Cooke, E. H. W., 290
  Duckham, Arthur M'Dougall, 337, 451
  Dunn, Walter T., 556
  Fitch, C. F., 290
  Fligg, G. W., 482
  Fry, E. Houghton, 354
  Gibb, W. Doig, 503
  Gillespie, Mr., 556
  Grice, John, 337
  Griffin, Second-Lieut. Clive, 106
  Gummer, Alderman George, 106
  Hadfield, Sir Robert A., 395
  Halford, F. L., 503
  Hazell, Second-Lieut. H. H., 556
  Hazell, T. H., 58
  Holmes, Percy F., 246
  Ineson, J. S., 395
  Jones, Frank H., 395
  Journet, Fred, 58, 290
  Kent, Stephenson, 337, 451
  Keogh, Sir Alfred, 193
  Leech, W. B., 58
  Lees, Second-Lieut. H. D., 246, 595
  Liberty, Sub-Lieut. W. J., 14, 395
  Lister, J. E., 296
  M'Lusky, W. B., 290
  Mackenzie, Ian A., 14
  Mason, Walter, 451
  Masters, Edward, 339
  Matthews, Lieut. and Qr.-Master R.D., 58
  Mews, John, 246
  Nimmo, Adam, 155
  Owen, Sergeant A. E. (D.C.M.), 261
  Pilditch, Lance-Corpl. Leonard, 106
  Porter, F. H., 35
  Porter, Lieut. Robert Hornby, 151
  Redwood, Sir Boverton, 354
  Richmond, Captain Frank, 106
  Smith, H. C., 246
  Topley, W. W., 130
  Touche, George A., 337
  Vint, Alderman W. F., 595
  Whitaker, John, 151
  Wood, Charles, 339
Perth Gas Employees' Wages and War Bonus, 169, 369
Perth (W. A.) and English Gas and Electrical Goods, 266
Peterborough Gas Company, 374
Peterhead Gas Manager's Salary, 369
Peterson and Ellis's Electrical Fire, 338
Petroleum Supply Branch of the Ministry of Munitions, 354
Phenol, Benzol, and Toluol, Government Payment for, 591, 613
Picric Acid for Estimating Naphthalene, 64
Pierce, Mr. R. Ffrench, on Artificial Fibre Mantles, 117
Pinner Gas Company, 395
Pipes—
  Dresser Couplings for Cast Iron, 117
  Leakages Caused in Gas, by Artillery Practice, 150
  Liability for Damage Caused by Burst Gas, 81
  Protection of Steel or Wrought Iron, 355
Plymouth—
  Death Caused by Faulty Geyser Ventilation Flues, 572
  Public Lighting, 571
Plymouth and Stonehouse Gas Company's Appeal to Consumers, 368
Pohlman and Downing, Messrs., on Cracking Gas Oils in Various Atmospheres, 24
Pontypridd Gas Undertaking, 424
Porter, Dr. J. B., on the Weathering of Coal, 344
Portland (Oregon), Gas Flood Lighting at, 201
Portsea Island Gas Company—
  Calorific Power Standard, 560
  Meeting of Shareholders, 368
  Prosecution for Supplying Impure Gas, 165, 302
  Report and Accounts, 314
Portsmouth Borough Council and the Gas Company, 165, 302
Potteries Gas Supply, 395
Power Gas in Mills, 298
Power Gases, Composition of, 516
Pratt, Mr. A. D., on Waste Heat from Retort Benches for Raising Steam, 249
Presentations (*see* Personal Paragraphs)
Presidio, Gas Leaks Caused by Artillery Practice at, 150
Preston, E. O., Bankruptcy of, 311
Preston, Street Explosion at, 414
Primitiva Gas Company and the Buenos Ayres Municipality, 265
Producer, Bituminous Coal Gas, 344
Producer Gas and the Utilization of Coke Dust or other Low Grade Fuel, 593, 607
Profit Sharing (*see* Co-Partnership)
Profits—
  Excess, Electricity Undertakings and, 108
  Municipal, and Income Tax, 27, 60, 573
  Rate Relief and, 78, 221, 502, 527, 571, 573
Prothero, Right Hon. R. E., on the Position of Sulphate of Ammonia, 172, 196
Provincial Electric Supply Committee, 243, 247
Publicity Scheme in Connection with Gas Lighting in the United States, 22
Pudsey Gas Company, 262
Pulling's, Mr. A., Defence of the Realm Manual, 109
Pump Rods, Ammonia, 404
Purchase of the Chelmsford Gas Works, 260, 475
Purification, Backward Rotation System of, 299
Pyridine, Solvent Action of, on Coal Constituents, 16

Quality, Importance of Maintaining a Gas Supply of Uniform, 116
Queensland, Gas Companies' Powers in, 292
Quicklime, Expansion of, when Wetted, 63

Radcliffe and Pilkington Calorific Power Application, 560
Railway Carriage and Coal Contracts, 528
Railway Wagons—
  Detention of, 596
  Pooling of—
    Coal Supplies and, 149
    In Scotland, 169
Read, Mr. H. L., on Surface Combustion for—
  Bakers' Ovens, 64
  Lead Melting, 298
Reading Gas Company—
  Death of Mr. H. Bilson Blandy, 14
  Directors' Length of Service, 566
  Meeting of Shareholders, 476
  Official Change, 58
  Presentation to Mr. Hamilton Baker, 77
Reay, Mr. W. H., on Gas Engine Lubrication, 158
Redcar, &c., Gas Company, 529
Redhill Gas Company, 477, 610
Reduction in the Price of Gas, 421
Refractory Material—
  American Industry, 291
  Mellor, Dr. J. W., on, 362, 560
  New Zealand Deposits, 169
  Some Physical Properties of the Two Chief Mineral Constituents of Coke Oven Bricks, 244, 253
  Testing of, 108
  Zirconia as a, 559
Registration of Business Names, 196
Rennie, Mr. J., on the Testing of Electric Meters, 555
Research Work—
  American Industries and, 105
  Bryan Donkin Legacy for, 349
  Editorial Comments, 449
  Fuel Economy, 449, 469
  Glass and Optics, 298
  Government Grant for, 595
  Radiant Temperature and Air Temperature of a Room, 349
Resignations (*see* Official Changes)
Restricted Occupations Order, 506
Retort Benches, Steam Raising by Waste Heat from, 249
Retort Carbon—
  Domestic Fuel from, 556
  Permits to Deal in, 109
Retorts (*see also* Carbonization)—
  Vertical—
    Distillation Process in, 248, 341
    Settle-Padfield, 299
    Woodall-Duckham at Cupar, 157
Rhead, Mr. T. F. E., on Some Physico-Chemical Considerations of Benzol Recovery from Coal Gas, 191, 207
Rhyl, Stealing Gas Fittings at, 83
Richmond Gas Stove Company—
  Gas Fire Construction, 113
  Industrial Canteen Book, 463
  Meeting of Shareholders, 568
Ridge Roasting Furnace Company, 150
Roads, Reinstatement of, 262
Robertson, Mr. J. A., on Interlinking Electricity Schemes, 59
Rochdale Gas Undertaking—
  Price of Gas, 620
  Wages Arbitration, 222
Romford Gas Company, 479
Rossendale Union Gas Company, 426
Rotherham and the Sheffield Gas Bill, 161
Royal Mint, Metal Melting by Gas at, 598
Royses' Review of the Manchester Tar Products Trade, 79
Rugby, A Differential Price for Electricity Question at, 291
Runcorn Gas Company's Calorific Standard Application, 150
Russell, Dr. E. J., on Artificial Manures, 297
Russell, Mr. Herman, on Gas Oils, 249

St. Albans Gas Company's Calorific Power Application, 58
St. Helens Calorific Power Order, 560
St. Mary Church Gas Works, 572
St. Pancras Electricity Undertaking, 58
Safety Code, A National Gas, 603
Saffron Walden Gas Leakage Question, 172
Salesmanship, London and Southern Junior Gas Association Discussion on, 70
Salford—
  Calorific Standard Question, 481
  Control of Coal Mines Representation, 529
  Gas Consumption during Fog, 37
  Gas Examiner for Out Districts, 478
  Gas Mains Assessment Appeal, 519
  Public Lighting, 83
Salisbury Gas Company, 424
Salonica Gas Company, 168
Saltcoats Gas Undertaking, 337, 595
Sardinian Lignites in Gas Manufacture, 467
Scarborough Gas Company—
  Calorific Power Order, 109
  Meeting of Shareholders, 370
  Report and Accounts, 263
Schaphorst, Mr. W. F., on Calculating the Weight of Steel in Tanks, 66
Schleswig-Holstein, Gas Shortage in, 264
Schröder, Herr R., on Natural Gas as Boiler Fuel, 115
Science—
  And Gas Manufacture, "Engineer" on, 108
  In Education, Value to Industry of, 55, 122
Scientific Assistance, Salaries and, 105
Scotland, Railway Wagon Pooling Scheme in, 169
Scott, Mr. E. Kilburn, on Share Investments in Customers' Businesses, 453
Scott, Mr. James, on Thorium, 120
Scott, Mr. Leslie, on Food Production and Fertilizers, 35
Scottish Junior Gas Association—
  Eastern District—
    Johnston, Mr. R. S., on the Work in the Gas Engineer's Office of the Dundee Gas Works, 411
    Visits—
      Cupar Gas Works, 157
      Dundee Tar Distillation Works, 411
      Falkirk Gas Works, 515
  Western District—
    Cross, Mr. R., on Tar, 553, 561
    Editorial Comments, 190, 553
    Lecture by Prof. G. G. Henderson, on the Chemist and the Gas Industry, 190, 213
    Visits—
      Falkirk Gas Works, 515
      Hamilton Gas Works, 411
Scrubbing, Intensive, and Ammonia Recovery, 63
Seaford, Price of Gas at, 573
Selas-Turner Company, 622
Settle Gas Company, 426
Settle-Padfield Vertical Retort System, 299
Sevenoaks Gas Company—
  Calorific Power Order, 354
  Cheap Burners, 262
  Meeting of Shareholders, 480
Shadwell, Mr. G. C., on Gas for Artificial Drying, 515
Shale Oil in New Brunswick, 509
Shales, Oil Producing Qualities of American, 120
Sheffield Electricity Undertaking and Industrial Demands after the War, 195
Sheffield Gas Company—
  Bill, 61, 161, 260
  Chamber of Commerce's Appreciation of, 425
  Comments, 552
  Gas Workers Fined for Neglect, 371
  Meeting of Shareholders, 566
  Report and Accounts, 367
Shields and Ramsay, Messrs., 260
Shipley Gas Undertaking, 478, 595
Shotley Bridge and Consett Gas Company, 527
Show Rooms of the Derby Gas Company, 18
Sidmouth and Toluol Recovery, 27
Silsden, Increase in Price at, 528
Simon-Carvès Company and the Koppers Recovery Plant Patents, 216
Sittingbourne Gas Company—
  Accounts, 476
  Calorific Power Application, 354
Skegness Gas Arbitration Award, 307
Sleaford Gas Company, 264
Sliding Scale, Question of Revision of the, 551, 565, 594, 614
Smith and Lesher, Messrs., on Cost of Coal in the United States, 78
Smoke Abatement, Dr. Dufton on, 308
Smoking in Gas Works, Workers Fined for, 426
Society of British Gas Industries—Chairmanship, 395
Society of Chemical Industry—
  Beckett, Mr. A. E., on a Laboratory Gas Meter, 298
  Club for Members, 406
  Jones, Mr. D. Trevor, on Thermal Decomposition of Low Temperature Coal Tar, 198
  Lessing, Dr. R., on Extracting Vaporous Constituents from Gas, 146, 159, 296, 334, 347
  Maclaurin, Mr. R., on Low Temperature Carbonization, 517
  Publication of Papers, 148
  Russell, Dr. E. J., on Artificial Fertilizers, 297
  Stewart, Mr. D. R., on Distillation of Brown Coal in Germany, 159
  Tookey, Mr. W. A., on the Composition of Power Gases, 516
  Wheeler and Stopes, Drs., on the Constitution of Coal, 148, 159
Sorauer, Herr P., on Gas and Injury to Vegetation, 71
South Metropolitan Gas Company—
  Coke Fire at Old Kent Road Works, 27
  Dividend, 194
  Editorial Comments, 241, 333
  Gas Globe Delivery Frauds, 148, 164
  Loss of the s.s. *Ravensbourne*, 312

South Metropolitan Gas Company (*continued*)—
Meeting of Shareholders, 360
Report and Accounts, 241, 245
Retirement of Mr. J. F. Braidwood, 451
Stealing Lead from, 265, 479
Women Workers, 263
Working Results, 396, 397
South Shields Gas Company—
Meeting of Shareholders, 473
Official Changes, 395
Report and Accounts, 415
South Staffordshire Mond Gas Company—
Bill, 62
Meeting of Shareholders, 372
Report and Accounts, 223
South Suburban Gas Company—
Armstrong's, Prof. H. E., Remarks at the Shareholders' Meeting, 468
Calorific Power Order—
Inquiry, 288, 308, 356, 391, 451
Lewisham Council and, 168
Chairman's Message to Co-Partners, 122
Comments, 393
Meeting of Shareholders, 416
Military Service Appeals, 369, 452, 475
Report and Accounts, 367
Working Results, 396, 397
Southampton County Council and Sulphate of Ammonia Warranty, 330
Southend—
Price of Gas in the Corporation Area, 423
Public Lighting, 37
Southend Gas Company, 477
Southport Gas Undertaking—
Annual Accounts, 122
Calorific Standard Question, 360
Tribunal Appeal, 417
Sowerby Bridge Gas Undertaking—
Benzol Recovery, 82, 374
Calorific Power Order, 150
Southern Association of Gas Engineers and Managers—
A Correction, 556
Editorial Comments, 499
General Business, 510, 556
Presidential Address of Mr. W. N. Westlake, 499, 510
Specific Gravity of Gases, An Accurate Method of Determining the, 115
Spelter Manufacture, 150
Sperr, Mr. F. W., Jun., on Benzol after the War, 295
Stanley, Sir Albert, on Wages and Taxation after the War, 595
Staveley Gas Company, 616
Stealing—
Breeze from the Dublin Gas Works, 480
Coal at Maidstone, 571
Gas Fittings at Rhyl, 83
Lead, &c., from the South Metropolitan Gas Company, 265, 479
Steel in Tanks, Calculating the Weight of, 66
Steel Turnings for Fractionating Column of Debenzolizing Plant, 565
Steuart, Mr. D. R., on Distillation of Brown Coal in Germany, 159
Stevenson's, Mr. George, Presidential Address to the Midland Association of Gas Engineers and Managers, 591, 605
Still Patents for Coke Oven Bye Products, 359
Stirling Gas Company's Calorific Power Order, 196
Stockport Gas Undertaking—
Extensions, 308
Wages and Labour Conditions, 81, 308, 527
Stockton-on-Tees—
Toluol Recovery at, 314
Wages Question, 26
Stoke Gas Undertaking, 395
Stoke-on-Trent, Price of Current for Cooking in, 108
Stokers and other Gas Workers Summoned for Neglect of Work, 128, 302, 371, 519, 619
Stopes and Wheeler, Drs., on the Constitution of Coal, 148, 159
Stoves, Experiences in the Early Days of, 574
Strabane Gas Undertaking, 528
Stretford Council and the Calorific Standard Question, 310, 311, 522
Stretford Gas Company—
Automatic Lighting Question, 374
Meeting of Shareholders, 522
Provisional Order, 62, 130, 310, 311, 522
Suffocation by Gas, 83, 122, 128 (2), 130, 263, 316, 367, 371, 374, 622
Suicides by Gas, 38
Sulphate of Ammonia—
American Output, 214
"Board of Agriculture Journal" on, 124
Bradbury and Hirsch's Market Review for 1916, 146, 166
Contract Litigation, 620
Corn Land Treatment by, 371
Editorial Comments, 104, 146
Exports, 19, 505
Food Controller's Committee, 311
Food Production and, 35, 124
Gas Companies and the Warranty Question, 310
Nitre Cake for the Manufacture of, 334, 345, 552, 569
Prices, 26, 311, 422
Prothero, Right Hon. R. E., on the Position of, 172, 196
Redhill Gas Company's Scheme for Supplying Cottagers, 616
Sulphuric Acid Prices, 55
Voelcker, Dr. J. A., on, 552, 569
Sulphate of Ammonia Association—
Literature, 289
Prices Question, 422
Sulphuric Acid Prices, 55
Sulphur in Coal Gas, Estimation of, 76
Sulphuretted Hydrogen Prosecution at Portsmouth, 165, 302
Sulphuric Acid—
Aldershot Gas Company and the Difficulty of Obtaining, 313
Makers, Proposed Association of, 57, 103, 145
Partial Substitution of Nitre Cake for, in Sulphate of Ammonia Manufacture, 334, 345, 552, 569
Prices of, 55, 71
Summer Time Act—
Arrangements for 1917, 606
Committee's Report on, 520
Editorial Comments, 500
Gas Undertakings and, 83
Limits in 1917, 37
Sunderland Gas Company—
Chairmanship, 595
Meeting of Shareholders, 524
Staff and the War, 246, 595
War Hospital Donation, 130
Surface Combustion for—
Bakers' Ovens, 64
Lead Melting, 298
Sutton Gas Company's Calorific Standard Application, 196
Swansea—
Public Lighting, 171, 615, 619
Town Council and the Calorific Power Question, 171, 615
Swansea Gas Company, 307, 615
Swindon United Gas Company Engineership, 106, 193
Switzerland and the Coal Tar Dye Industry, 126
Sydenham's, Lord, Plea for More Light in London, 221

"T.N.T."—
Poisoning—
Cases of, 161, 221
Chetwynd, Lord, on, 221
Rules for the Use of, 558
Tanderagee Acetylene Gas Supply, 128
Tanks, Calculating the Weight of Steel in, 66
Tar—
Analysis, 255, 288
Cross, Mr. Reginald, on, 553, 561
Dehydrating and Debenzolizing Plant—
At Ossett, 449, 464
Steel Turnings for Filling the Fractionating Column of, 265
Oils for Diesel Engines—
Basingstoke Electricity Undertaking and, 428
Possibilities of, 155
Specification, 104
Price Variation, 476
Products Trade in Manchester, 79
Reducing the Water Content of, 503
Tests at Manchester University, 615
Thermal Decomposition of Low Temperature, 198
Tree, 153, 249
Taxation and Wages after the War, 595
Teignmouth, Complaints of Low Pressure at, 129
Telephone, Fine for Non-Attention to, 262
Temperature Measurements in Clay Works Practice, 560
Teune and Kummel, Heeren, on Distillation Process in the Vertical Retort, 248, 341
Texas Gas Association, 150
Thermal Decomposition of Low Temperature Coal Tar, 198
Thermometers, Correction of, in the Determination of Boiling Points, 110
Thirsk Gas Company, 370
Thorium, Mr. James Scott on, 120
Thornton and Hartley, Messrs., on Metal Melting, 601
Thurso Gas Company, 151
Tickhill Gas Company, 302
"Times," The, on—
Directors' Fees and Income Tax, 263
Gas Heated Furnaces, 219
Tipperary Guardians and Electricity, 505
Tipton Gas Undertaking, 265
Todmorden—
Gas *v.* Electricity at, 526
War Bonus, 266
Toluol (*see* Benzol)
Tonbridge Gas Company—
Calorific Power Standard, 130
Meeting of Shareholders, 480
Provisional Orders, 62
Tookey, Mr. W. A., on the Composition of Power Gases, 516
Toronto Consumers' Gas Company, 34
Torquay Gas Company—
Calorific Power Order, 196
Meeting of Shareholders, 573
Torquay Town Council—
And the Calorific Standard, 128, 249
Labour Shortage at St. Mary Church Gas Works, 572
Tottenham District Light, Heat, and Power Company—
Borrowing Powers, 32
Calorific Power Order, 359
Gas Appliance Rental Charges, 316, 359
Increased Consumption, 128
Tottenham District Light, Heat, and Power Company (*continued*)—
Meeting of Shareholders, 364
Military Service Appeals, 619
Price Increase, 527
Report and Accounts, 307
Working Results, 396, 397
Trade Wastes, 413
Training of Employees, 154
Trautschold, Mr. Q., on Belt Conveyors, 19
Travancore Monazite Deposits, 218
Tredegar Gas Undertaking—
Condition of the Works, 424
Failure of the Supply, 424
Trinitrotoluene (*see* "T.N.T.")
Truro Gas Company, 573
Tunbridge Wells Gas Company—
Meeting of Shareholders, 476
Official Changes, 106, 337, 395, 476
Turner, Mr. W. V., on Protection of Steel or Wrought Iron Pipes, 355
Tynemouth Gas Company, 374, 524

Underhay's, Mr. F. G., Digest of Patent Cases, 63
United States (*see* America)
Uxbridge Gas Company, 371

Valve, An Improved Slide, 355
Van Gieson and French, Messrs., on Dual Lighting Systems for the Home, 254
Vegetation, Gas and Injury to, 71
Ventnor Gas and Water Company, 395
Victoria, Brown Coal in, 354
Voelcker, Dr. J. A., on Fertilizers and their Supply in War Time, 552, 569

Wakefield, Failure of the Electric Light at, 374
Wakefield Gas Company, 421
Walker, C. & W., Ltd., 574
Walker and Wallsend Gas Company, 264, 314
Walsall Gas Profits, 574
Walter, Mr. C. M., on Metal Melting by High Pressure Gas, 599
Walter and Marsh, Messrs., on New Methods of Measuring Gas under Varying Conditions of Temperature and Pressure, 335, 350
Wandsworth, Wimbledon, and Epsom District Gas Company—
Increase in Price, 573
Meeting of Shareholders, 470
Report and Accounts, 373
Working Results, 396, 397
War, The—
Gas Engineers and Staffs and, 14, 35, 58, 60, 106, 151, 246, 261, 290, 395, 556, 595
Lighting Curtailment (*see* Lighting)
National Service Volunteers, 405
Wages and Taxation after, 595
War Finance—
Comments, 336
Gas Industry and, 105, 122, 243, 262, 290, 310, 315, 337, 398, 452, 455, 475, 482, 504
Halliwell, Mr. S. E., on, 339
Williams, Mr. A. C., on, 455
Ward, W. A., & Co., 311, 372
Ware, Mr. Leon H., on Reducing the Proportion of Unprofitable Consumers, 506
Warrenpoint, Increased Price of Gas at, 161, 302
Warrington Gas Works, Fire at, 128
Waste Heat and Gas Electrical Generating Stations, Ltd., 528
Water Gas, Exhaust Steam for Generating, 299
Watford Gas Company, 472
Wath and Bolton Gas Board, 404
Weight of Steel in Tanks, Calculating the, 66
Weights and Measures, Mr. Allan Granger on, 121
Wellingborough Gas Company, 373
Wellington (Salop) Gas Company, 477
Welsbach Light Company—
Alien Securities, 425
New Issue of Shares, 524
West, Mr. R. D., on Trade Wastes, 413
West Bromwich Gas Works Additions, 266
West of Scotland Iron and Steel Institute, 362
Westbury Gas and Coke Company, 26
Westlake's, Mr. W. N., Presidential Address to the Southern Association of Gas Engineers and Managers, 499, 510
Westminster City Council and the Marking of Public Lamps, 422
Westminster Technical School Gas Fitters' Classes, 574
Weston-super-Mare Gas Company—
Calorific Power Order, 196
Report and Accounts, 477
Weymouth Consumers' Gas Company, 421
Whatmough's, Mr. W., Presidential Address to the Manchester Institution of Gas Engineers, 447, 450, 458
Wheeler and Stopes, Drs., on the Constitution of Coal, 148, 159
Whitby Gas Company, 479
Whitchurch Gas Works, 246, 503
Whiteley, Mr. F. Ogden, on Municipal Gas Profits and Income Tax, 60
Wicklow Gas Works, 151
Wigan Gas Finances, 78
Willcox, Mr. F. W., on the Lumen as a Measure of Illuminating Power, 147, 160
Willenhall Gas Company, 302

Williams, Mr. A. Canning, on—
Departmental Harmony, 404
War Savings Associations, 455
Wills, 106, 121, 150, 247, 411, 560, 608
Wilson, Mr. J. A., on Benzol Recovery, 73
Winchester Water and Gas Company, 476
Windsor Gas Company, 621
Woking District Gas Company—
Calorific Value Order, 14
Meeting of Shareholders, 527
Wolverhampton Gas Company, 426
Women Workers during the War, Gas Undertakings and, 80, 119, 262, 263, 423, 478, 480
Woodall, The late Sir Corbet—
Scholarship, 339
Statue of, 287
Woodhouse, Mr. W. B., on Gas for Electricity Generation, 555
Woolwich Borough Council and Trench Reinstatement, 262
Workington Gas Profits and the Rates, 78
Worthing Gas Company—
Calorific Power Application, 196
Meeting of Shareholders, 477
New Loan Capital, 128, 171
Wright, John, & Co., Ltd.—
Associated Works of, 393, 401
Meeting of Shareholders, 567
Wynne-Edwards, Rev. J. R., on Salaries and Scientific Assistance, 105

Yeadon, Mr. J. A., on Briquette Making, 206
Yeadon and Guiseley Gas Works, 559
Year 1916, Electricity Retrospect of, 15
York Gas Company—
Directors' Length of Service, 526
Military Exemption Application, 479
Report and Accounts, 426
Yorkshire Electrical Distribution Company, 616
Yorkshire Junior Gas Association—
A Discussion Meeting, 297, 354
Leask, Mr. E. A., on Town Gas and Industrial Furnaces, 148, 155
Visit to the Yeadon and Guiseley Gas Works, 559
Yorktown and Blackwater Gas Company, 621
Youngstown (Ohio), Coke Oven Plant at, 395

Zirconia as a Refractory Material, 559

REGISTER OF PATENTS.

[*The names printed in italics are those of persons by whom patents have been communicated.*]

Aarts, C. J. G.—Zinc Sulphide and Ammonium Sulphate, 357
Aarts, J. G.—Ammonia Production from Coke, 163
Aktiebolaget Ingeniorsfirma Fritz Egnell—Gas Analysis Apparatus, 409
Barralet, T. E., and the Parkinson Stove Company, Ltd.—Thermostat, 301
Barrett, M., and the Leeds Fire-Clay Company, Ltd.—Preventing the Disintegration of Refractory Materials, 518
Birch, G.—Inverted Burners for Heating and Lighting, 162
Carpenter, T. R.—Regulators for Gas Burners, 301
Casbon, W., and Dunkinson, A. J.—Incandescent Gas Burners, 29
Christopher, J. E.—Combined Gas Cooler and Washer, 410
Davis, H. N., and Twigg, W. R.—
Gas Fire Burners, 68
Gas Fires, 119
Falk, Stadelmann, & Co., Ltd., and Falk, G.—Incandescent Gas Burners, 358
Farge, F. C.—
Actuating Gas Cocks, 409
Igniting and Extinguishing Burners, 30
Fuller, W. J. H.—Gas Lamps, 117
Guest, A. A., Gibbons Bros., Ltd., and Wigley, J.—Discharging and Charging Machines, 299
Halkett, R.—Gas Fired Crucible Furnaces, 301
Hall, I.—Gas Fired Melting Furnaces, 118
Hutchinson, B. G.—Coin Freed Meters, 214
Ionides, A. C.—
Burning Gaseous Mixtures, 357
Proportioning Gaseous Mixtures, 117
Keith, J. & G.—
Firing Gas Furnaces, 28
Gas Fired Crucible Furnaces, 357
Larsen, C. F.—Pyrophoric Gas Lighter, 118
Mercer, A., Young, E., and Meters Limited—Coin Freed Prepayment Mechanism, 31
Perry, F.—Production of Ammonia, 518
Richard, V. H.—Cooking and Heating by Gas, 409
Richards, R. S., and the Smokeless Fuel Syndicate, Ltd.—Distilling Carbonaceous Material to Produce Smokeless Fuel and Recover Bye-Products, 67
Riter-Conley Manufacturing Company—
Apparatus for Conveying Retort Charges from One Level to Another, 518
Charging Gas Retorts, 215, 358
Manipulating Mechanism for Coal Gas Generating Apparatus, 28
Treatment of Coal Gas, 29
Riter-Conley Manufacturing Company, Carpenter, H. A., Hibbard, R. L., and Warner, A. W.—Machines for Charging and Discharging Gas Retorts, 358 (2), 410
Rollason, A.—Increasing the Heating Power of Coke, 518
Rosemberg, J. M. M., and Brosse, P. E. M.—Pyrophoric Gas Lighters, 357
Scott-Snell, C., and Anderson, D.—Gas Fires, 118
Smith, C. H.—Treating Coal, 118
South Metropolitan Gas Co. and Chandler, D.—Atmospheric Gas Burners, 518
Svenska Aktiebolaget Gasaccumulator—Incandescent Gas Lamp, 357
Swanston, F. J.—Lighting and Extinguishing Gas Lamps, 28
Thomson, David, Ltd., Gallimore, J., and Cook, D.—Gas Ovens or Furnaces, 410
Thuman, F.—Gas Producers, 69
Toogood, H. J., and Robert Dempster & Sons, Ltd.—Shoots for the Delivery of Coal, Coke, &c., to Conveyors, 68
Twells, A. H.—Automatic Temperature Controlling Means, 357
Twomey, W. K.—Burners and Methods of Burning Gas, 162
Vanston, T. A.—Condensers for Gas, 68
White, A. E.—
Apparatus for Conveying Retort Charges from One Level to Another, 518
Charging Gas Retorts, 215, 358
Manipulating Mechanism for Coal Gas Generating Apparatus, 28
Treatment of Coal Gas, 29
White, J., and Canova, V.—Coin Freed Meter Apparatus, 214
White, W. W.—Separating Volatile Products from Solid Carbonaceous Material, 356
Yates, H. J., and Askam, J. F.—Gas Heating Burners, 31
Yates, H. J., and Brayshaw, S. N. & E. R.—Gas Furnaces, 68

Ammonia, Production of—
Aarts, J. G., 163
Perry, F., 518
Analysis Apparatus—Aktiebolaget Ingeniorsfirma Fritz Egnell, 409
Burners, Gas—
Atmospheric—South Metropolitan Gas Company and Chandler, D., 518
Fire—Davis, H. N., and Twigg, W. R., 68
Heating—Yates, H. J., and Askam, J. F., 31
Heating and Lighting—Birch, G., 162
Incandescent—Casbon, W., and Dunkinson, A. J., 29
Regulators for—Carpenter, T. R., 301
Sterilizing—Twomey, W. K., 162
Upright Bijou—Falk, Stadelmann, & Co., Ltd., and Falk, G., 358
Burning Gaseous Mixtures—Ionides, A. C., 357
Carbonizing Process—
Richards, R. S., and the Smokeless Fuel Syndicate, Ltd., 67
White, W. W., 356
Charging and Discharging Retorts—
Guest, A. A., Gibbons Bros., Ltd., and Wigley, J., 299
Riter-Conley Manufacturing Company, Carpenter, H. A., Hibbard, R. L., and Warner, A. W., 358 (2), 410
White, A. E. (*Riter-Conley Manufacturing Company*), 215, 358
Coke, Increasing the Heating Power of—Rollason, A., 518
Condensers—Vanston, T. A., 68
Conveying Material from one Level to Another—White, A. F. (*Riter-Conley Manufacturing Company*), 518
Cooler and Washer, Gas, Combined—Christopher, J. E., 410
Fires, Gas—
Davis, H. N., and Twigg, W. R., 119
Scott-Snell, C., and Anderson, D., 118
Furnaces, Gas—
Halkett, R., 301
Hall, I., 118
Keith, J. & G., 28, 357
Thomson, D., Ltd., Gallimore, J., and Cook, D., 410
Yates, H. J., and Brayshaw, S. N. & E. R., 68
Gaseous Mixtures, Proportioning—Ionides, A. C., 117
Igniting and Extinguishing Devices—
Farge, F. C., 30, 409
Swanston, F. J., 28
Lamps, Gas—
Fuller, W. J. H., 117
Svenska Aktiebolaget Gasaccumulator, 357
Meters, Prepayment—
Hutchinson, B. G., 214
Mercer, A., Young, E., and Meters Limited, 31
White, J., and Canova, V., 214
Preliminary Heating of Coal to be Coked—Smith, C. H., 118
Producers, Gas—Thuman, F., 69
Purifying Coal Gas—White, A. E. (*Riter-Conley Manufacturing Company*), 29
Pyrophoric Gas Lighters—
Larsen, C. F., 118
Rosemberg, J. M. M., and Brosse, P. E. M., 357
Refractory Materials, Preventing the Disintegration of—Barrett, M., and the Leeds Fire-Clay Company, Ltd., 518
Regulators for Burners—Carpenter, T. R., 301
Retort Charging and Discharging (*see* Charging)
Retort Closing Plugs, Manipulating—White, A. E. (*Riter-Conley Manufacturing Company*), 28
Shoots for Feeding to Conveyers—Toogood, H. J., and Dempster, R., & Sons, Ltd., 68
Smokeless Fuel Manufacture—Richards, R. S., and the Smokeless Fuel Syndicate, Ltd., 67
Stoves, Gas Cooking—Richard, V. H., 409
Thermostats—
Barralet, T. E., and the Parkinson Stove Company, Ltd., 301
Twells, A. H., 357
Zinc Sulphide and Ammonium Sulphate—Aarts, C. J. G., 357

Applications for Patents, 31, 69, 119, 163, 215, 266, 315, 374, 410, 469, 529, 566, 620

CORRESPONDENCE.

Adam, W. G.—Oil Washing for Benzene and Toluene, 414
Allan, A. P.—Science in Education, 122
Armstrong, H. E.—South Suburban Gas Company's Meeting, 468
Bond, J.—Debonzolizing Plant at Southport, 565
Brearley, J. H.—Manchester Institution Meeting, 565
Brown, H. C.—Sulphate of Ammonia Prices, 26
Brown, J. H.—Toluol Plant at the Leeds Corporation Gas Works, 162
Carder, C. H.—Gas Affairs at Oldbury, 299
Constant Reader—Profit Sharing Schemes, 122
Cunnington, A.—Intrinsic Brilliancy and Inconsistency, 519, 565
Donaldson, J. H.—Benzol Recovery—Are Gas Undertakings doing their Share? 356
Duxbury, T. H.—Revision of the Sliding Scale, 614
Engineer—Oil Washing of Gas, 26
Glover, T.—Fuel Economy, 613
Gulland, F. A.—Revision of the Sliding Scale, 614
Herring, W. R.—
Candle Power and Calorific Values, 468
"Work" of the Institution, 413
Humphrys, N. H.—Settle-Padfield Retort and the Vertical Retort System, 299
Jones, H. E.—War Loan, 122
Kendrick, H.—Manchester University Tar Tests, 615
Livesey, F.—Government Prices for Benzol, Toluol, and Phenol, 613
London and North-Western Railway Company, General Manager's Department — South Suburban Gas Company's Calorific Standard Application, 356
Nobbs, C. G.—Cooking by Gas and Electricity, 27
Paddon, A. M.—Preservation of the Standard Rate of Dividend, 565
Shadbolt, R. G.—Directorial Length of Service, 566
Simon-Carves, Ltd.—Toluol Plant at the Leeds Corporation Gas Works, 162
Stedman, A. B.—Directorial Length of Service, 566
Townsend, H.—Gas Institution and Next Year's Meeting, 258
Tyndall, J. F.—Colliery Owners' Profits, 356
Valon, A.—Revision of the Sliding Scale, 614
West Norfolk Farmers' Manure and Chemical Co., Ltd.—Sulphate of Ammonia Prices, 26
Wilson, R. W.—Restrictions in France, 122

Adam's, Mr. W. G., Article on Oil Washing for Benzene and Toluene—Adam, W. G., 414
Armstrong, Prof., at the South Suburban Gas Company's Meeting—Armstrong, H. E., 468
Benzol Recovery—Are Gas Undertakings doing their Share?—Donaldson, J. H., 356
Candle Power and Calorific Values — Herring, W. R., 468
Colliery Owners' Profits—Tyndall, J. F., 356
Cooking by Gas and Electricity—Nobbs, C. G., 27
Directorial Length of Service—
Shadbolt, R. G., 566
Stedman, A. B., 566
France, Restrictions in—Wilson, R. W., 122
Fuel Economy—Glover, T., 613
Government Prices for Benzol, Toluol, and Phenol—Livesey, F., 613
Institution of Gas Engineers, Next Year's Meeting of the—Townsend, H., 258
Institution of Gas Engineers, "Work" of the—Herring, W. R., 413
Intrinsic Brilliancy and Inconsistency—Cunnington, A., 519, 565
Leeds Corporation Toluol Plant—Brown, J. H. (Simon-Carves, Ltd.), 162
Manchester District Institution Meeting—Brearley, J. H., 565
Manchester University Tar Tests—Kendrick, H., 615
Oil Washing of Gas—Engineer, 26
Oldbury Gas Affairs—Carder, C. H., 299
Profit Sharing Schemes—Constant Reader, 122
Science in Education—Allan, A. P., 122
Settle-Padfield Retort and the Vertical Retort System—Humphrys, N. H., 299

Sliding Scale, Suggested Revision of the—
Duxbury, T. H., 614
Gulland, F. A., 614
Paddon, A. M., 565
Valon, A., 614
South Suburban Gas Company's Calorific Standard Application—General Manager's Department of the London and North-Western Railway Company, 356
Southport Debenzolizing Plant—Bond, J., 565
Standard Rate of Dividend, Preservation of the—Paddon, A. M., 565 (*see also* Sliding Scale)
Sulphate of Ammonia Prices — Brown, H. C. (West Norfolk Farmers' Manure and Chemical Company, Ltd.), 26
War Loan—Jones, H. E., 122

LEGAL INTELLIGENCE.

Bagley, Mills, and Co., Ltd., and the Carl Still Patents, 359
Benzol and Petrol, Carriage of, 620
Carless, Capel, and Leonard, Messrs., and the Carriage of Benzol by Rail, 620
Cheadle Gas Company to Pay Damages for Nuisance, 619
Coatbridge Gas Company Sued, 259, 359, 415
Conspiracy and Protection of Property Act, Prosecutions under the, 302, 519
Contracts as Affected by the Ministry of Munitions Order, 519
Contracts of Service, Workmen's, 302, 519
Debenture, Extension of Time for Registering a, 302
Dependant's Action for Alleged Negligence, 414
Frank, B., Attorney-General *v.*, 469
Gas Works Nuisance, Damages for a, 619
"Gascolite," Liability for an Accident with, 259, 359, 415
Gorey Gas and Water Company's Winding Up, 164
Gosport Gas Company's Workman Fined, 519
Henderson *v.* Gas Light and Coke Company, 414
Kempton, W. J., H., & R. K., and Hallett Convicted of Offences under the Prevention of Corruption and Bribery Act, 164
Lea Bridge District Gas Company *v.* Malvern, 163
Manchester Gas Department Workmen Fined, 302
Mantles, Seizures of, 469
Patents Court Applications for Licences to Work, 216, 359
Portsmouth Gas Company Prosecuted for Supplying Impure Gas, 302
Prevention of Corruption and Bribery Act, Charge under, 164
Simon-Carvès, Ltd., and German Koppers Patents, 216
South Metropolitan Gas Company and Globe Delivery Frauds, 164
Sulphate of Ammonia Contract, Breach of a, 620
Tickhill Gas Light and Coke Company, 302
Van der Schurt, A. B., Attorney-General *v.*, 469
Watts, Watts, & Co. *v.* Mitsui & Co., 620
Woman's Liability for Gas Consumed after Re-Marriage, 163

PARLIAMENTARY INTELLIGENCE.

Coal Mines, State Control of, 414, 469, 566, 615
Fuel Research Committee, 469
Gas Light and Coke Company's Bill, 566, 615
Lighting Regulations and Street Accidents, 359, 519
London, Lighting of, 359, 469, 519
Opening of the Session, 302
Tottenham, Calorific Power Order at, 359
Tottenham, Rental of Gas Appliances at, 359

Progress of Bills, 302, 359, 414, 566, 615